Surgical handling of uveitic membranes in pediatric phakic eyes

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Key words: Lens sparing procedure, membranectomy, pediatric uveitis, uveitic membrane

Five- and three-year-old girls with similar presentation of right eye (RE) non-granulomatous anterior uveitis and secondary glaucoma were under steroid, anti-glaucoma medication and post-surgical Peripheral Iridectomy (PI) done 2 weeks back. Visual acuity of RE in case-1 was 20/120 and in case-2 was 20/1000. Anterior segment showed uveitic pupillary membrane with suspected complicated cataract [Figs. 1a and 2a]. In view of visual rehabilitation of the young children, with biometry ready, RE synechiolysis/membranectomy ± cataract extraction with intraocular lens (IOL) implantation was planned. Under adequate viscoelastic, posterior synechiolysis was done. A clear lens underlying a dense fibrotic uveitic membrane was revealed [Figs. 1b and 2b]. By using Utthrata's forceps, the edge of the membrane was secured and peeled out *in-toto* to expose an undamaged clear lens [Figs. 1c and 2c].

Postoperatively RE vision improved to 20/30 in case-1 and 20/240 in case-2. Both children had quiet eyes, visual axis clear, and IOP well controlled [Figs. 1d and 2d].

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Discussion

In pediatric uveitis, cataract and pupillary membranes are possible causes of stimulus deprivational amblyopia.[1] Although cataract surgery with IOL has become a relatively safe procedure in pediatric uveitis,[2] case selection is vital. Pupillary membrane can be resolved with lesser complications than cataract surgery. When pupillary membranectomy is planned, it is important to keep in mind that the underlying lens may be clear or have minimal cataract. Apart from Varner,[3] Chan *et al*.[4] and Rosenberg *et al*.[5] literature describing the occurrence of pupillary inflammatory membrane as a separate entity, mimicking cataract and surgical handling of such a non-resolving thick fibrotic uveitic membrane and technique of its removal with an underlying clear lens in pediatric uveitis was found lacking.

Our article attempts to highlight the importance of lens sparing surgery. Preoperative imaging and biometry are recommendable in such situation. However, all possible measures should be taken to preserve the underlying clear lens during membranectomy.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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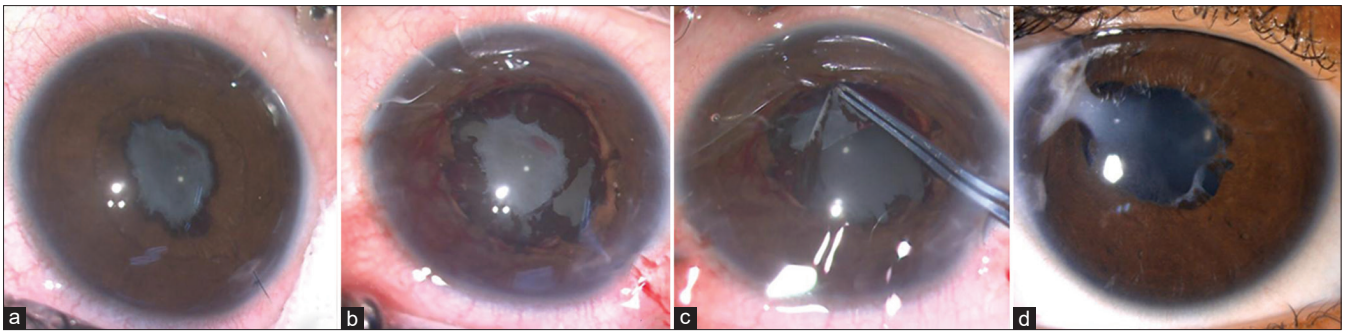

Figure 1: Clinical photograph of the right eye of Case 1: (a) preoperative clinical picture (surgical PI – at 11 o'clock position - occluded) (b) intraoperative picture after synechiolysis showing membrane over lens (c) intraoperative picture during uveitic membrane removal revealing clear lens (d) postoperative clinical picture (a, b and c: surgeon view)

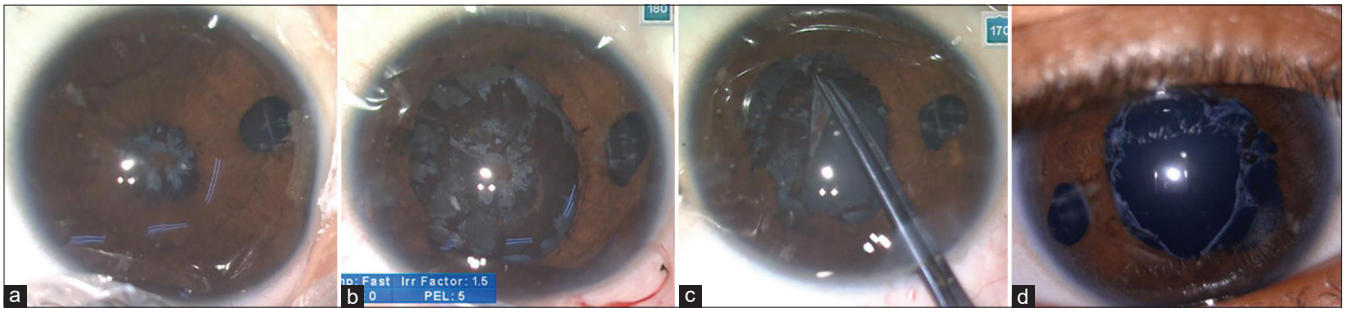

Figure 2: Clinical photograph of the right eye of Case 2: (a) preoperative clinical picture (surgical PI –at 8 o'clock position- patent), (b) intraoperative picture after synechiolysis showing membrane over lens, (c) intraoperative picture during uveitic membrane removal revealing clear lens, and (d) postoperative clinical picture (a, b and c: surgeon view)

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